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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/526,948	10/28/2005	Peter Frank Ekhart	0470-050777	7559

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EXAMINER	
BLAND, LAYLA D	
ART UNIT	PAPER NUMBER
1623	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/526,948	EKHART ET AL.	
	Examiner	Art Unit	
	Layla Bland	1623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 December 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *13,15-29,32 and 33* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *13, 15-29, 32, 33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *9/4/2007*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 7, 2007, wherein claims 12, 14, 30, and 31 are cancelled, claims 13, 24-29 and 32 are amended, and new claim 33 has been added, has been entered.

Claims 13, 15-29, 32 and 33 are pending in this application and are examined on the merits herein.

In view of the cancellation of claims 13, 24-29 and 32, all rejections made with respect to those claims in the previous office action are withdrawn.

In view of Applicant's amendment submitted December 7, 2007, the rejection of claims 13-23 and 30-32 under 35 USC 112, second paragraph, for being indefinite, is withdrawn.

Priority

It is noted that claim 33 does not find support in the priority application, European Application No. 02078684.4. Thus, claim 33 is afforded a priority date of September 9, 2003, not September 9, 2002.

Information Disclosure Statement

Only the English abstracts of documents 6, 8, 13, and 14 of the IDS submitted September 4, 2007 were considered.

The following are new objections and rejections not made of record in the previous office action:

Claim Objections

Claim 13 (and dependent claims) is objected to because of the following informalities: the claim is drawn to a method of "inducing satiety and satiation." Satiety and satiation are interpreted by the examiner to be synonymous. Appropriate correction or clarification is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 13, 19, and 27 (and all claims dependent from these) are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 13 is drawn to a method comprising the administration of an effective amount of a branched α-glucan. The claim does not state what the amount should be effective for, rendering the claim indefinite.

Claim 19 is drawn to the method of claim 13, wherein the α-glucan is used in a concentration of 1-10% by weight. Claim 13 is simply drawn to the administration of α-

glucan. It is unclear what else is being administered, such that α-glucan is 1-10% of the total.

Claim 27 is drawn to the food composition of claim 28, wherein the α-glucan comprises reuteran. The α-glucan is understood to be one compound. "Comprises" is open language, thus it is unclear whether "α-glucan" refers to a single compound or mixtures of compounds.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 13, 15-21, 23-26, 28, and 32 are rejected under 35 U.S.C. 102(b) as being anticipated by a typical carnivorous diet as evidenced by Unisa.edu (CARBOHYDRATE METABOLISM) and Elmhurst.edu (Glycogen).

Unisa.edu teaches that the liver contains about 65 g/kg (6.5%) of glycogen and muscle contains about 14 g/Kg (1.4%) of glycogen [Glycogen and glucose interconversion].

Elmhurst.edu teaches that glycogen is composed of 1700-600,000 glucose units linked 1-4 with 1-6 branching every 8-10 units (10-12%) [Glycogen].

Carnivores, including humans, regularly consume muscle and liver tissue to induce satiation. Liver and muscle tissue contain about 6.5% and 1.4%, respectively, of glycogen, and also contain protein. Glycogen is highly branched and has a high molecular weight.

The above cited references do not address the viscosity of aqueous solutions of glycogen at pH 6.8 and pH 2. However, the instant specification states that glycogen has a viscosity increase of more than 400% from pH 4 to pH 2, which is expected to be even more pronounced from pH 6.8 to pH 2.

Thus, the claims are anticipated.

The method by which the α-glucan is produced carries no patentable weight because the claims are drawn to a composition and method of using that composition, not the method of making.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 13, 15-23, 24-29, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van Geel-Schutten et al. (Applied and Environmental Microbiology, 1999, pp. 3008-3014, Vol. 65(7), PTO-1449 submitted September 4, 2007).

Van Geel-Schutten et al. teach that polysaccharides such as cellulose, pectin, and starch find application in the food industry. Exopolysaccharides (EPS) produced from lactic acid bacteria are more desirable than the aforementioned polysaccharides because lactic acid bacteria are food-grade organisms with GRAS status [page 3008, first paragraph]. Lactic acid bacteria and EPS contribute to the taste, smell, texture, and preservation of fermented milk products [page 3008, second paragraph]. One such EPS is produced from sucrose by the action of *Lactobacillus reuteri* [page 3008, third paragraph] (a preferred embodiment referred to as reuteran on page 5 of the instant specification).

Van Geel-Schutten et al. do not explicitly teach a food composition comprising reuteran or the administration of such, and do not teach compositions comprising 1-10% by weight of reuteran.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to prepare a food composition, especially a fermented milk composition, comprising reuteran and to administer that composition to a subject. Van Geel-Schutten teaches the desirability of EPS produced by lactic acid bacteria (of which reuteran is one) in fermented milk products. Van Geel-Schutten suggests a food product; the administration of a food product to induce satiety flows logically. It is within the skill of the skilled artisan to optimize the amount of reuteran for the desired taste, smell and texture.

The method by which the α-glucan is produced carries no patentable weight because the claims are drawn to a composition and method of using that composition, not the method of making.

Van Geel-Schutten et al. do not address the viscosity of aqueous solutions of glycogen at pH 6.8 and pH 2. However, the instant specification, page 8, teaches that milk drinks containing reuteran demonstrate a thickening effect due to increased HCl concentrations.

A reference is good not only for what it teaches by direct anticipation but also for what one of ordinary skill in the art might reasonably infer from the teachings. (*In re Opprecht* 12 USPQ 2d 1235, 1236 (Fed Cir. 1989); *In re Bode* 193 USPQ 12 (CCPA) 1976). In light of the forgoing discussion, the Examiner concludes that the subject matter defined by the instant claims would have been obvious within the meaning of 35 USC 103(a). From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole was *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

> the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 13, 15, 16, 18, 19, 20-22, 24, 28, 29, 32, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cote et al. (US 5,786,196, July 28, 2998).

Cote et al. teach that high-molecular weight alternan consists primarily of α-1,3-linked and α-1,6-linked glucose residues with approximately 10% branching [column 1, lines 10-17]. Alternan has potential as a substitute for gum arabic and for use as a bulking agent in foods, particulary as noncaloric, carbohydrate-based soluble food additives in artificially sweetened foods [column 1, lines 34-39].

Cote et al. do not exemplify a food composition comprising alternan.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to prepare a food composition comprising alternan and at least 1 wt% of a food protein. Cote et al. suggest the use of alternan as an additive to artificially sweetened foods. The skilled artisan would appreciate that, although not all foods contain protein, many do. For example, sugar free ice creams, yogurts, puddings, and gelatin snacks contain protein. It is within the skill of the skilled artisan to optimize the amount of glucan in a food composition to achieve the desired taste and texture. Thus, it would have been obvious to make such a composition and the administration of a food product to induce satiety flows logically.

The method by which the α-glucan is produced carries no patentable weight because the claims are drawn to a composition and method of using that composition, not the method of making.

A reference is good not only for what it teaches by direct anticipation but also for what one of ordinary skill in the art might reasonably infer from the teachings. (*In re Opprecht* 12 USPQ 2d 1235, 1236 (Fed Cir. 1989); *In re Bode* 193 USPQ 12 (CCPA) 1976). In light of the forgoing discussion, the Examiner concludes that the subject matter defined by the instant claims would have been obvious within the meaning of 35 USC 103(a). From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole was *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

Response to Arguments

Applicant's arguments with respect to the prior art rejections presented in the previous office action have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Layla Bland whose telephone number is (571) 272-9572. The examiner can normally be reached on M-F 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anna Jiang can be reached on (571) 272-0627. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Layla Bland
Patent Examiner
Art Unit 1623
December 21, 2007

Shaojia Anna Jiang

12/31/07

Supervisory Patent Examiner
Art Unit 1623
December 21, 2007